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| APPLICATION NO. | FI | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------------------|------|------------|--------------------------|-------------------------|-----------------|
| 09/829,888 | C | 04/10/2001 | Jesse Vernon Corbett JR. | RPS920000131US1 | 8549 |
| 25299 | 7590 | 08/04/2003 | | | |
| IBM CORE | | N | EXAMINER | | |
| PO BOX 12195 DEPT 9CCA, BLDG 002 | | | | CUEVAS, PEDRO J | |
| RESEARCH TRIANGLE PARK, NC 27709 | | | 709 | ART UNIT | PAPER NUMBER |
| | | | | 2834 | |
| | | | | DATE MAILED: 08/04/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|---|---------------------------------|--|--|--|--|--|--|
| Office Antique Commence | 09/829,888 | CORBETT ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Pedro J. Cuevas | 2834 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address P riod for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | |
| 1) Responsive to communication(s) filed on 11 h | <u>flarch 2003</u> . | | | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | is action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-15</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. |) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | v (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | | |
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DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.
- 2. In response to applicant's argument that "the Examiner is mute about any of the limitations in independent claims 7 and 15, and in dependent claims 2-6 and 8-12" it must be noted that in paragraph 8 of the Office Action dated November 29, 2002, clearly indicates that claims 1-12 and 15 are all rejected under 35 U.S.C. § 102(b).

Although not individually typed, claims 2-12 and 15 subject matter is present in the body of the rejection. This is also the case in the present Office Action.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,935,071A to Schneider et al. in view of U.S. Patent No. 5,735,243 to Asai et al.

Schneider et al. clearly teaches the construction of an ultrasonic biometric imaging and identity verification system comprising:

a direct current (DC) motor (92) having a stator and a rotor, said stator fixed to a reference frame;

a threaded shaft (170) coupled to said rotor;

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a torsion spring (330, 332) disposed perpendicular to said axis of said threaded shaft, said torsion spring comprising a center portion coaxially attached to said threaded shaft and an outer portion attached to said reference frame, storing rotational energy from DC motor when said DC motor rotates said threaded shaft in a first rotary direction, said torsion spring returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized; and

a translation actuator (112) threadedly coupled to said threaded shaft, said actuator rotationally stopped and operable to laterally translate in response to rotation of said threaded shaft by said DC motor and having portion operable to engage a mechanical load.

However, it fails to disclose a shaft coaxially coupled to a rotational shaft stop, said shaft stop having a first and second shaft stop surfaces, and a first and a second actuator stop, said first actuator stop contacting said first shaft stop surface in a first rotation position and said second actuator stop contacting said second shaft stop surface at a second rotation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft.

Asai et al. teach the construction of a controller having a shaft coaxially coupled to a rotational shaft stop, said shaft stop having a first and second shaft stop surfaces (9, 12), and a first and a second actuator stop (6a, 7a), said first actuator stop contacting said first shaft stop surface in a first rotation position and said second actuator stop contacting said second shaft stop surface at a second rotation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act

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tangential to a radius vector of said threaded shaft for the purpose of preventing a throttle valve from locking at its fully closed position.

It would have been obvious to one skilled in the art at the time the invention was made to use the controller disclosed by Asai et al. on the ultrasonic biometric imaging and identity verification system disclosed by Schneider et al. for the purpose of preventing a valve or translation actuator from locking at any position.

- 5. With regards to claims 6 and 11, Schneider et al. in view of Asai et al. disclose an ultrasonic biometric imaging and identity verification system and controller where an application of a drive voltage pulse to said DC motor drives said linear actuator in a first direction until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored rotational energy in said torsion spring, said stored rotational energy driving said linear actuator in a second direction until said first actuator contacts said first shaft stop surface.
- 6. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,935,071A to Schneider et al. in view of U.S. Patent No. 5,735,243 to Asai et al. as applied to claims 1-12 and 15 above, further in view of U.S. Patent No. 5,777,404 A to Has.

Schneider et al. in view of Asai et al. disclose the construction of an ultrasonic biometric imaging and identity verification system as described above.

However, it fails to disclose an elastic strip or a linear spring having a first and a second end, said elastic strip fixed to said frame at said first end and to said shaft at said second end, said Art Unit: 2834

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elastic strip wrapping said shaft when said shaft is rotated in said first rotation direction, said elastic strip stretching and thus storing energy.

Has teaches the construction of a rotating actuator having an elastic strip (10) and a linear spring (1) for the purpose of setting the flywheel (2) and actuating element (3) into movement through a defined free angle (20).

It would have been obvious to one skilled in the art at the time the invention was made to use the strip and string disclosed by Has on the ultrasonic biometric imaging and identity verification system and controller disclosed by Schneider et al. in view of Asai et al. for the purpose of setting the range of movement of the actuating element and returning it to the starting position when the system is not energized.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas July 30, 2003

Thomas M. Colylortes